DOCUMENT RESUME

ED 474 161 HE 035 703

AUTHOR	Kuncharapu, Indumathi; Cass, Alvah R.; Carlson, Carol A.; Scott, Jack R.
TITLE	Morning Report in Family Medicine Residency Programs: A Descriptive Study.
PUB DATE	2003-09-00
NOTE	17p.
PUB TYPE	Reports - Research (143)
EDRS PRICE	EDRS Price MF01/PC01 Plus Postage.
DESCRIPTORS	*Case Method (Teaching Technique); *Graduate Medical Students; *Medical Case Histories; *Medical Education

ABSTRACT

Morning Report (MR) is a frequently held case conference in most Family Medicine (FM) residency programs among medical learners who discuss recent inpatient admissions before the day's care of patients. This study conducted a national survey of FM residency program directors to describe the roles of faculty and residents in facilitating MR. Document activities typically included in the sessions, and evaluate director's perceptions of the educational value of MR compared to other learning activities. Responses were received from 163 FM residency programs (33% response rate). Data indicate that MR is commonly held in FM residency programs, with the chief benefit being its educational value. Sixty percent of programs regularly conducted MR for 1 hour or more each week, and one in five programs conducted both inpatient and outpatient MR conferences with faculty, residents, students, nurses, and other personnel in attendance. Cases are most often selected by third-year residents to provide opportunities for teaching improvements in both inpatient and ambulatory settings. Recommendations are made for the improvement of MR programs. (Contains 2 figures and 26 references.) (SLD)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 474 161

Morning Report in Family Medicine Residency Programs: A Descriptive Study

Authors:

Indumathi Kuncharapu, MD
Assistant Professor

Alvah R. Cass, MD, SM
Associate Professor

Carol A. Carlson, BA
Research Associate
Department of Family Medicine
University of Texas Medical Branch
301 University Boulevard
Galveston, Texas 77555-1123

Jack R. Scott, EdD, MPH*
Senior Medical Educator
Office of Educational Development
University of Texas Medical Branch
301 University Boulevard
Galveston, Texas 77555-0664
Phone: (409) 772-2791
Fax: (409) 772-2732
Email: jrscott@utmb.edu

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

I. Kuncharapu

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Date Submitted:

Word Count: 2462

Key Words: Morning Report; In-patient Morning Report; Out-patient Morning Report; Case presentations.

*Corresponding Author

BEST COPY AVAILABLE

HE035703

Morning Report in Family Medicine Residency Programs: A Descriptive Study

INTRODUCTION

Morning Report (MR) is a frequently held case conference in most Family Medicine (FM) residency programs among medical learners who discuss recent in-patient admissions prior to the days' care of patients. This interdisciplinary conference uses group communication and learning to facilitate patient management decisions. Although MR has been a longstanding practice in FM, most of the reported research has been limited to the field of Internal Medicine. A systematic review of the literature revealed limited evidence for the educational value of MR, despite its ubiquitous practice in primary care.[1] We conducted a national survey of FM residency program directors to describe the role of faculty and residents in facilitating MR, document activities typically included in the sessions, and evaluate director's perceptions of the educational value of MR compared to other learning activities.

METHODS

After Institutional Review Board approval of the study, a survey questionnaire was mailed to all FM program directors, along with a cover letter and self-addressed stamped envelope. A total of 497 program directors were contacted. Names and addresses were obtained from the Directory of Family Practice Residency Programs, 2001 Edition, published by the American Academy of Family Physicians. Responses remained confidential, although not anonymous.

The first mailing occurred in April 2001. After four weeks, a reminder card was sent to each program. A telephone survey was conducted among a random sample of

non-responders, stratified by the programs' administrative structure, to determine the proportion of non-responders that do not conduct MR compared to those not responding for other reasons. For this purpose, programs were stratified into categories as shown in Figure 1, using data from the AAFP database. Medical school administered or affiliated programs were combined because of their similar administrative structures.

Instrument

We designed a 30-item paper survey to assess various aspects of in-patient MRs. Items were developed through extensive literature review and dialogue with colleagues inside and outside of our institution. The initial survey was modified after expert panel review and pilot tested by our institutional FM faculty. Response formats included Likert scales, rating scales, multiple-choice options, and written/open-ended comments. The survey included program demographic information, administrative structure, and a general description of MR organizational features. The second section focused on specific aspects of MR purposes and content, processes and procedures, perceived educational and clinical value, and self-reported individual comments.

Analysis

Descriptive statistics were computed for items related to (1) general programmatic information, (2) the events that occur during MR, (3) the role of faculty and residents in the conduct of MR and, (4) MR educational value compared to other learning activities. Categorical and ordinal data are reported as frequencies or proportions. Continuous data are reported as medians with ranges.

We divided programs into two groups, based on responses to an item rating perceived educational value of MR as "High", "Moderate" or "Low." Programs that reported the

educational value of MR as "High" or "Moderate" were compared to programs that reported the value as "Low". Bivariant comparisons were made for various attributes and activities associated with MR, using contingency tables and the associated Chi square or Fischer's exact test for statistical significance. All statistical data analyses were performed using SPSS software.

RESULTS

Background Information and Structure

A total of 163 FM residency program directors responded, giving a 33% response rate of all programs nationally. As shown in Figure 1, the sample of respondents was similar with all programs nationally with respect to administrative structure. Nationally, 13.9% are university-based programs, 83.1% are community-based programs, and 3.0% are military programs. Of our respondents 10.4% were university-based programs, 84.0% were community-based programs, and 4.9% were military programs.

Responses to the survey showed that 84% of programs conduct MR, with 19% conducting both in-patient and out-patient MR. A follow-up telephone survey of a random sample of non-respondents demonstrated that 91% of non-respondents include MR among their activities and their program structure was comparable to initial survey responders.

Patient admissions to the FM service averaged 85 per month with an average bed capacity of 178. Most (73%) reported conducting in-patient MR Monday through Friday; 26% conduct it intermittently during the week; and 24% on Saturday and Sunday in addition to weekdays. In addition, 24% reported that their residents regularly attend other specialty MRs.

Sixty percent revealed that their MR lasted one hour or longer at a site conveniently near the clinics (87%), including dining halls, staff lounges, conference rooms, and even hallways (!). Ninety percent reported an adequate room site; 57% provide food/refreshments.

MR Organization and Related Patient Management Issues

The instructional and organizational activities listed in Figure 2 were reported by responding programs to be frequent or consistent elements of MR.

Our results reveal that residents, especially third-year residents, more often identify and decide cases for presentation more frequently than do faculty. More than half the programs indicated that the case presenter commonly reviewed all medical charts, while the facilitator (i.e., team member who guides the group process) did so only occasionally. A concise case was consistently presented, including history of present illness, past history, medications, allergies, social history, review of systems, physical exam and lab findings. In addition, a list of differential diagnoses was frequently discussed in the context of discussing appropriate diagnostic tests, patient treatment issues, patient psychosocial issues, ethical issues, and cost-effective patient management. Bedside teaching to examine unique findings appears to be an uncommon MR feature.

Time for discussing learning issues was allocated most often during the case presentation, or in some programs in discussion after the case presentation, with the remaining time spent on the discussion of other issues (e.g., previous day's issues/events, admissions, etc.). A problem list of unresolved learning issues was commonly compiled, and a third of programs also followed up on the previous day's learning issues. However, assigning a scribe to write on the blackboard or documenting a summary of activities and issues was seldom undertaken.

When asked to rank educational value and patient care, 56% ranked educational value more important than patient care (44%). Among all educational activities provided to residents, program directors ranked MR second in order of importance to precepting in the clinic, followed by in-patient work rounds; in-patient attending rounds; noon conferences; Internet as an

evidence-based medicine source; and reading textbooks/articles. Among activities at MR, the highest ranked educational benefit was learning patient management, followed in descending order by presentation skills; evaluating teaching skills; use of information technology; and discussing clinical research.

We sought information about the perceived educational value and appropriate learning environments for MR in FM programs. Programs that ranked the educational value of MR higher than its value in patient management were found to more frequently discuss: appropriate diagnostic tests ($p= 0.0$); patient treatment issues ($p = 0.006$); cost effective patient management ($p = 0.004$); patient ethical issues ($p=0.026$); and patient psychosocial issues ($p= 0.002$).

Half of the programs either sometimes or never discussed goals and objectives (e.g., to help conceptualize content and monitor competencies). Furthermore, very few programs provided residents with formal training in small group facilitation skills. Group discussion was nearly four times more likely to be interactive than didactic. For example, in interactive discussion, the faculty attending might ask questions and lead discussion among the participants, whereas in didactic discussion, the attending would speak and the participants listen. A formal evaluation of the residents is done by 24% of the programs and of the faculty/attendings by 19% of the programs.

The survey asked about the use of educational tools at MR. Handouts or journal articles were distributed either frequently or consistently. Other tools used in descending order of frequency were: Personal Digital Assistants (PDA's) (33%); Overhead projectors (18%); Internet access (11%); PowerPoint (10%); Distance Learning (2%) and other technologies (i.e., x-ray viewboxes, TV/video equipment).

Several programs reported what they considered as unique MR features. Ten programs reported attendance by different medical specialists and four promoted the residents' use of teaching methods such as literature reviews, facilitator feedback, and health promotion methods. Some offered a hybrid teaching method (i.e., rotating a different discipline per day, e.g.: Ob/Gyn on Mondays, Pediatrics on Tuesdays, etc.). Ideas for format changes proposed by respondents included improved teaching and learning methods; presentations; evidence-based medicine; evaluation; and less lecturing. Others suggested inclusion of patient teaching rounds and greater faculty participation, including "hospitalists," social workers, and case managers.

DISCUSSION

Our data indicate that MR is commonly held in FM residency programs, with the chief benefit being its educational value. Sixty percent revealed they regularly conduct MR for one hour or more once per week, between Monday and Friday. One in five programs conduct both in-patient and out-patient MR conferences where participants include: faculty, residents, attending faculty, medical students, nurse practitioners, clinical pharmacists, social workers or case managers. Regular attendance by other medical specialists helps enrich learning perspectives. Many are held in a convenient location and provide food/refreshments.

The MR learning environment in FM is similar to that reported for Internal Medicine by Schiffman (1995), where both patient care and educational goals are satisfied. In the Internal Medicine setting,[2-12] MR is a highly regarded patient management conference [13, 14] where teaching and learning are enhanced through healthcare team interaction within the in-patient setting.[2, 3, 12, 15, 16] In Internal Medicine, MR is thought to benefit residents as a vehicle for teaching, communications, and patient management.[9, 12, 16-18] An effective learning environment is created when residents, faculty, and other healthcare professionals are interactively involved in this case-

based learning process [4, 8, 16, 18, 19] without a domineering and competitive atmosphere, commonly referred to as "Morning Distort." [14, 20, 21] Interactive learning is facilitated by case documentation [17] to revisit interesting cases [22] that enhance resident learning.[12, 21, 23] Such a shared learning environment is expected to prove beneficial in managed care settings to facilitate rational healthcare decisions [24] on both in-patient and out-patient services.[13]

Clearly, MR provides a valuable teaching opportunity for residents and faculty embracing both learning purposes and patient management. Our descriptive study provides educational insights into how FM organizes and conducts MR, so that patient management issues are effectively resolved and learning dimensions are addressed simultaneously. While patient care is a time-honored tradition for MR, our study demonstrates that in FM settings, resident educational purposes are paramount.

We found that residents and faculty play an important role in organizing and conducting in-patient MR. Cases are selected from recently admitted, interesting patients, most often by third-year residents. Case selection seems to be more resident-centered in FM than in Internal Medicine, where faculty and chief residents play a greater role.[1] Among the programs we surveyed, the faculty case facilitator reviewed the medical records less frequently than the case presenter.

Formal training for residents in their role as interactive group discussion facilitators is important to improve resident teaching skills.[12] Facilitated group discussion may involve patient care factors related to differential diagnosis and treatment strategies or patient management issues (i.e., socio-economic concerns, insurance coverage, discharge and continuous care follow-up). Relevant learning is enhanced when extended to the patient bedside for direct patient

interaction. In this way, MR can serve specific patient care and management needs in the context of education.

Structured educational activities can significantly extend the learning outcomes of MR. Though we found limited use of MR for evaluation of residents or faculty, it is still important to assess the case content and guide the inclusion of follow-up learning issues to optimize the MR experience. Furthermore, there are valuable benefits in recording and measuring case conference outcomes to enrich discussions. Although educational tools and technologies are valuable learning adjuncts, they are seldom employed despite their benefit in other educational environments. For example, few programs report the use of PDA's (Personal Digital Assistants), overhead projectors, x-ray view boxes, or similar devices that enhance the acquisition or dissemination of pertinent information. Creating goals and objectives for the case conference would also enhance its value for intentional learning by residents. However, fewer than half of programs actually incorporate goals and objectives to communicate learning expectations, nor do they include, as some recommend,[22, 25] formal documentation to provide a sense of direction for the case conference or to revisit unresolved learning issues.

Several programs, however, are experimenting with new and interesting educational and format innovations in MR. Some use MR as an opportunity to refine resident teaching skills or as a time to review clinical literature related to specific patient presentations. Others share interdisciplinary approaches across several medical specialties on different days of the week. Another innovation for MR in FM is the out-patient MR for case-based learning [7, 14, 17, 26] where common medical concerns are shared in a collaborative ambulatory care setting.

Limitations

This survey obtained information from program directors only. A simultaneous survey of resident could provide useful additional perspectives. Moreover, direct observational studies are more likely to yield valid and objective assessments than self-report surveys. Although our study's response rate was low, we were able to validate that the sample was reasonably representative by a follow-up telephone survey of non-respondents, to determine whether they failed to respond because they didn't conduct in-patient MR in their programs. In fact, a majority (91%) of non-respondents were conducting in-patient MR. The low initial survey response may be related to the survey's length.

CONCLUSIONS

Our data provide perspectives on MR in FM residency programs that suggest opportunities for teaching improvements in both in-patient and ambulatory settings. We make the following recommendations: 1) We encourage an interdisciplinary approach facilitated by a senior or chief resident who exhibits the requisite group process skills. Other members of the healthcare team (e.g., nurses, case managers, etc.) and medical specialists (e.g., pediatricians, dermatologists, etc.) should be included in these discussions. 2) To promote real-time decision-making, MR should be organized as an hour-long case conference held in a convenient, yet confidential facility near the in-patient setting, with refreshments/food, appropriate medical references, and Internet access. 3) We recommend that faculty consult with the senior or chief resident when selecting interesting recent patient cases. 4) To develop leadership skills and promote learning of required core competencies, residents leading MR sessions should identify appropriate learning objectives related to the patient case and use these to present and facilitate case discussion. 5) A scribe may be assigned to write on the black/whiteboard for documentation

of significant patient findings and learning issues for follow up at the next session. 6) Seeing the patient as a group at the bedside after MR enhances learning from direct patient interaction.

In summary, MR should be prized for its educational value to FM residents and its contributions to efficient patient management. This study provides program directors with perspectives and potential strategies to enhance the MR learning experience for their learners. Innovations in MR implementation in both the in-patient and ambulatory care setting may enhance the quality of this unique, enduring learning activity.

12

References:

1. Amin Z, Guajardo J, Wisniewski W, Bordage G, Tekian A, Niederman L. Morning Report: focus and methods over the past three decades. *Academic Medicine.* 2000;75(10):S1-5.
2. D'Allesandro D, Qian F. Do Morning Report format changes affect educational content? *Medical Education.* 1999;33:648-654.
3. De Groot L, Siegler M. MR Syndrome: Implications for Internal Medicine. *New England Journal of Medicine.* 1979;301(23):1285-1287.
4. Gross C, Gerard G, Reisman A, Sepkowitz K, Callahan M. Resident expectations of Morning Report: a multi-institutional study. *Archives of Internal Medicine.* 1999;159:1910-1914.
5. Harris EJ. Morning Report. *Annals of Internal Medicine.* 1993;119(5):430-431.
6. Lesky L, Borkan S. Strategies to improve teaching in the ambulatory medicine setting. *Archives of Internal Medicine.* 1990;150:2133-2137.
7. Malone M, Jackson T. Educational characteristics of ambulatory morning report. *Journal of General Internal Medicine.* 1993;8:512-514.
8. Schiffman F. Morning Report and work rounds: opportunities for teaching and learning. *Transactions of the American Clinical and Climatalogical Association.* 1995;107:275-286.
9. Wartman S. Morning Report revisited: a new model reflecting medical practice. *Journal of General Internal Medicine.* 1995;10:271-275.
10. Ways M, Kroenke K, Umali J, Buchwald D. Morning Report: a survey of resident attitudes. *Archives of Internal Medicine.* 1995;155:1433-1437.

11. Wenger N, Shpiner R. Analysis of Morning Report. *Annals of Internal Medicine.* 1993;119(5):395-399.

12. Pupa L, Carpenter S. Morning Report: a successful format. *Archives of Internal Medicine.* 1985;145:897-899.

13. Recht L, Kramer R, Schwartz W. Morning Report in the computer era: tradition meets technology. *The Medical Teacher.* 1995;17(3):327-334.

14. Demopoulos B, Pelzman F, Wendroth S. Ambulatory MR: An underutilized educational modality. *Teaching and Learning in Medicine.* 2001;13(1):49-52.

15. Markakis K, Beckman H, Suchman A, Frankel R. The path of professionalism: cultivating humanistic values and attitudes in residency training. *Journal of Academic Medicine.* 2000;75(2):141-150.

16. Ullian J, Bland C, Simpson D. Active learning: An alternative approach to defining the role of the clinical teacher. *Academic Medicine.* 1994;69(10):837-838.

17. Spickard A, Hales J, Ellis S. Outpatient Morning Report. *Academic Medicine.* 2000;75(2):197.

18. Gjerde C, Coble R. Resident and faculty preceptions of effective clinical teaching in Family Practice. *Journal of Family Practice.* 1982;14(2):323-327.

19. Glenn J, Reid J, Mahaffy J, Shurtleff H. Teaching behaviors in attending-resident interactions. *Journal of Family Practice.* 1984;18(2):297-304.

20. Lazare A. Shame and humiliation in the medical encounter. *Archives of Internal Medicine.* 1987;147:1653-1658.

21. Rosenblum N, Nagler J, Lovejoy FJ, Hafler J. The pedagogic characteristics of a clinical conference for senior residents and faculty. *Archives of Internal Medicine.* 1995;149(9):1023-1028.

22. Barton L, Rice S, Wells S, Friedman A. Pediatric MR: An appraisal. *Clinical Pediatrics.* 1997;36(10):581-583.

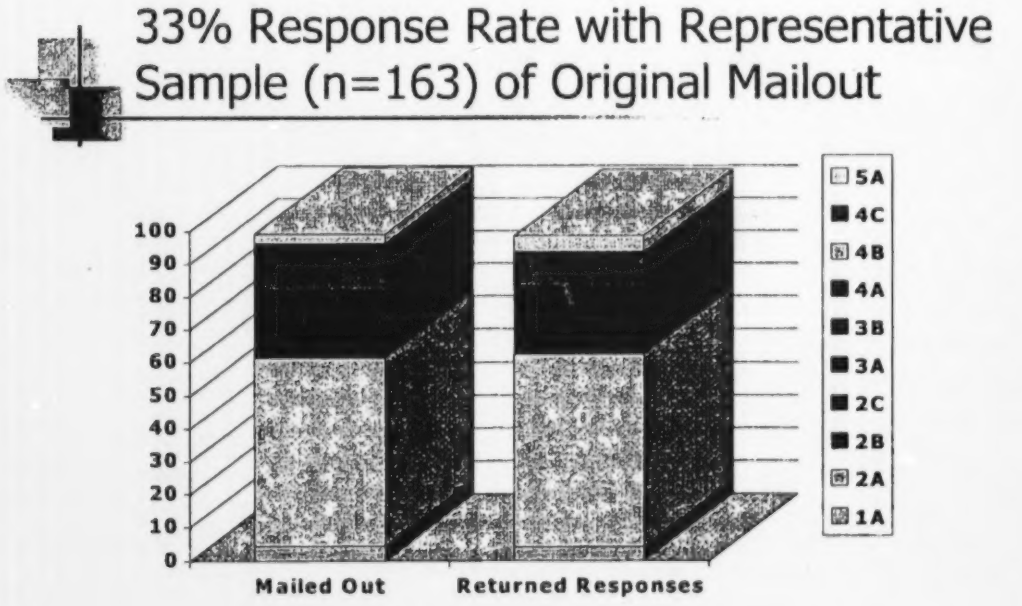
23. Greenberg L, Goldberg R, Jewett L. Teaching in clinical settings: factors influencing resident's perceptions, confidence, and behaviours. *Medical Education.* 1984;18:360-365.

24. Skeff K, Stratos G, Berman J, Berman M. Improving clinical teaching: Evaluation of a national dissemination program. *Archives of Internal Medicine.* 1992;152:1156-1161.

25. Parrino T, Villanueva A. The principles and practices of Morning Report. *Journal of the American Medical Association.* 1986;256(6):730-733.

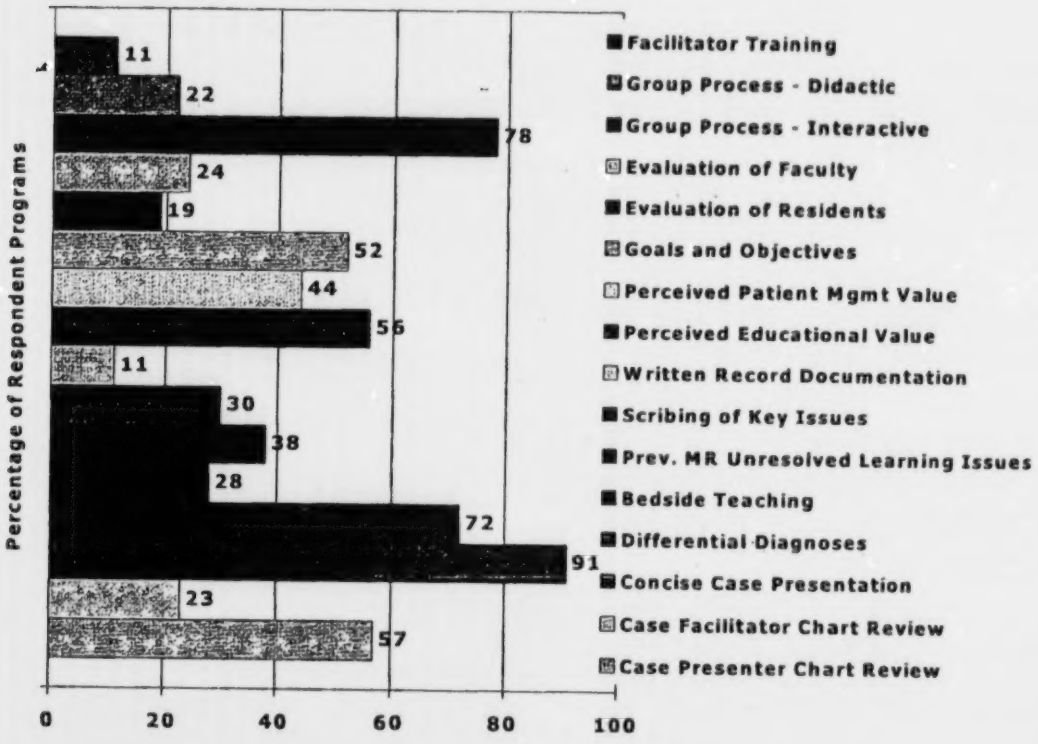
26. Spickard A, Wenger M, Corbett EJ. Three essential features of a workshop to improve resident teaching skills. *Teaching and Learning in Medicine.* 1996;8(3):170-173.

Figure 1. **Comparison of Study Sample with All FM Residency Programs, By Structural Category**



16

Figure 2. MR Organization and Activities Done Frequently/Consistently



BEST COPY AVAILABLE

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

ERIC

REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title:	Morning Report in Family Medicine Residency Programs:A Descriptive Study
Author(s):	Kuncharapu, I; Scott, J; Cass, A; and Carlson, C.
Corporate Source:	University of Texas Medical Branch; Galveston, TX 77555-0408
Publication Date:	January 9, 2003

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Level 1

☑

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Level 2A

☐

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 2B

☐

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, → please

Signature:	Printed Name/Position/Title: JACK SCOTT, ASSIST. PROF / GRAD
Organization/Address: University of Texas Medical Branch;	Telephone: (409) 772-2791 FAX: (409) 772-2732
	E-Mail Address: JRSCOTT@UTMB.EDU Date: January 14, 03